

Ten-Year End State Strategic Task Order Plan, Revision 0

**November 2021
Idaho Cleanup Project**

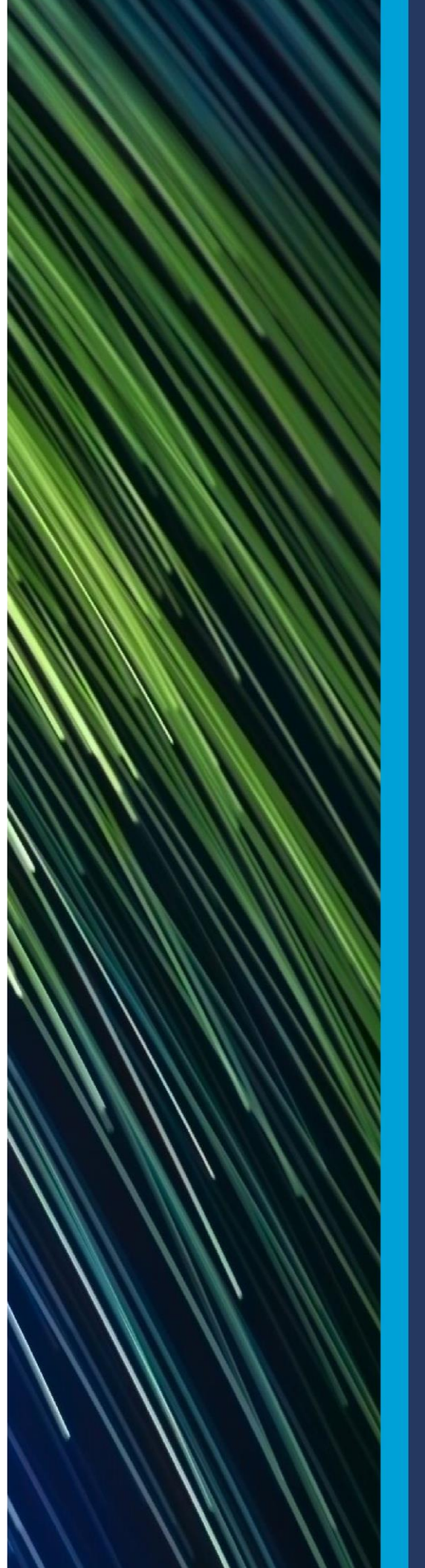


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Acronyms and Abbreviations

AI	Agreement to Implement
AMWTP	Advanced Mixed Waste Treatment Plant
ARP	Accelerated Retrieval Project
ATR	Advanced Test Reactor
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CH	Contact-Handled
CPAF	Cost Plus Award Fee
CPFF	Cost Plus Fixed Fee
CPIF	Cost Plus Incentive Fee
CPNF	Cost Plus No Fee
D&D	Deactivation and Decommissioning
DOE	Department of Energy
DOE-ID	DOE Idaho
EBR-II	Experimental Breeder Reactor II
EM	DOE Office of Environmental Management
ES&H	Environmental Safety and Health
FFA/CO	Federal Facility Agreement and Consent Order
FFP	Firm-Fixed Price
FY	Fiscal Year
HLW	High-Level Waste
ICDF	Idaho CERCLA Disposal Facility
ICP	Idaho Cleanup Project
IDIQ	Indefinite Delivery/Indefinite Quantity
IEC	Idaho Environmental Coalition, LLC
IMC	Integration & Mission Continuity
INL	Idaho National Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
ISA	Idaho Settlement Agreement
IWTU	Integrated Waste Treatment Unit
LLC	Limited Liability Corporation
MLLW	Mixed Low-Level Waste
NE	DOE Office of Nuclear Energy
NNCO	Notice of Noncompliance Consent Order
NNSS	Nevada National Security Site
NRF	Naval Reactor Facilities
OCVZ	Organic Contamination in Vadose Zone
PEMP	Performance Evaluation Management Plan
PMB	Project Management Baseline
PWS	Performance Work Statement
RCRA	Resource Conservation and Recovery Act
RH	Remote-Handled
RWMC	Radioactive Waste Management Complex
SBW	Sodium-Bearing Waste

Acronyms and Abbreviations (concluded)

SDA	Subsurface Disposal Area
STP	Site Treatment Plan
TBD	To Be Determined
TO	Task Order
TRU	Transuranic
WIPP	Waste Isolation Pilot Plant

Introduction

This plan focuses on the Department of Energy (DOE) Idaho Operation Office's (DOE-ID) strategic imperatives for site cleanup activities that will be performed on the Idaho Cleanup Project (ICP) across fiscal years (FY) 2022–2032 and potentially through FY 2037. The work includes treating, storing, and dispositioning a variety of radioactive and hazardous wastes; removing and dispositioning targeted buried waste; removing or deactivating unneeded facilities; and preparing spent nuclear fuel (SNF) and high-level waste (HLW) for removal from Idaho. These activities are necessary to implement DOE-ID strategic objectives, meet the milestones contained within the Regulatory Agreement, and achieve specific End States on the Idaho Site. The Idaho Environmental Coalition, LLC, (IEC) and DOE-ID have worked collaboratively to establish eight task orders (TOs) that will drive the execution of this Master Indefinite Delivery/Indefinite Quantity contract (Contract). Following the Transition TO (TO1) the next two TOs are focused on maintaining continuity of operations and providing core programs that support reliable and safe delivery throughout the contract duration. The remaining five TOs are End State focused and will drive the development of specific TOs aimed at facility closures and waste management and disposition and represent specific advances to achieving End States at the ICP. The joint strategy for achieving each End State has been developed to include specific objectives for successful project execution and metrics for measuring and demonstrating progress throughout the life of the Contract.

Support Task Orders	
Implementation (TO2)	Focused on maintaining continuity of operations, providing core programs across the ICP, and defining/prioritizing TO development
Integration & Mission Continuity (IMC) Phase 1 (TO3)	
IMC Phase 2 (TO3)	Focused on programmatic support required over the life of the contract and assuring variable and high-risk work scopes not resolved during IMC Phase 1 are continued until risks have been mitigated to ensure control between IEC and DOE-ID
End State Task Orders	
RWMC Closure (TO4)	Drive the development of TOs to achieve specific End States to include facility closures and waste management and disposition as supported by specific Integration & Mission Continuity (IMC) Phase 1 and 2 activities
IWTU Operations & Tank Closure (TO5)	
SNF Transfer & Packaging (TO6)	
Calcine Disposition (TO7)	
Naval Reactors (TO8)	

To provide clarity in the tables and figures throughout the Plan, we have color-coded each TO as shown below. Note that TO numbers do not reflect the order in which task orders will be prepared and negotiated. This will be done via an Integrated Priority List.

This Plan is adaptive and focused on achieving DOE End State objectives and identifying strategic imperatives that anticipate challenges and risks; proactively manage, mitigate, and control them; and bring proven solutions during all phases of TO development, implementation, and closeout.

This Plan is a living document that will be managed and updated at least annually to address changes in DOE priorities or emerging imperatives.

A. Background

The ICP work encompasses ongoing and contemplated work scopes, to include:

- Continuing Implementation and IMC Phase 1 and 2 work scopes to assure programmatic support and ongoing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial actions
- Completing treatment of the liquid sodium-bearing waste (SBW)
- Closing the Idaho Nuclear Technology and Engineering Center (INTEC) tank farm
- Operations and closure of the Radioactive Waste Management Complex (RWMC)
- Retrieving targeted buried waste and closure of the Subsurface Disposal Area (SDA)
- Dispositioning transuranic (TRU) and mixed wastes
- Completion of the SDA cap
- Deactivation and dispositioning of the Advanced Mixed Waste Treatment Plant (AMWTP)
- Stabilization and repackaging of SNF and HLW to make it “Road Ready”
- Completing wet-to-dry fuel transfers
- Operating and maintaining the balance of plant at INTEC to support ongoing programs (Calcine Disposition Project, Spent Fuel Programs, Tank Closure)
- Supporting Naval Reactors for the disposition of aging facilities

The ICP contract is an Indefinite Delivery/Indefinite Quantity (IDIQ) End State completion contract with an estimated contract ceiling of approximately \$6.4 billion over a 10-year ordering period, with an option for award of End State TOs for up to an additional five years. The anticipated DOE Office of Environmental Management (EM) budget by FY for the 10-year period is estimated to be approximately \$400 million per year. Additional funding may be provided for non-EM work, such as Naval Reactors.

B. Regulatory Milestones, Project Management Baseline, and Office of EM Goals and Priorities

B.1 Regulatory Milestones

The ICP regulatory milestones are contained in the 1995 Idaho Settlement Agreement (ISA), 2019 Supplemental Agreement (SA), the 2008 Agreement to Implement (AI), the Site Treatment Plan (STP), Colorado Settlement Agreement, the Notice of Noncompliance Consent Order (NNCO), and the Federal Facility Agreement and Consent Order (FFA/CO).

These documents identify the following specific milestones related to the contemplated IEC End State TOs.

- Complete SBW Treatment (~12/31/2028 based on processing percentage) – Requires the removal of the ~900,000 gallons of SBW from the tanks and treatment of the SBW through the Integrated Waste Treatment Unit (IWTU) facility.
- Complete SDA Cap (12/31/2028) – Includes the installation of the evapotranspiration soil cap over the SDA and restoration of the area to natural vegetation.

- Calcine Waste Road Ready (12/31/2035) – Requires the design and testing of calcine retrieval systems and the retrieval, processing, and packaging of calcine and carbonated waste to make them road ready.

B.2 ICP Lifecycle Baseline

The ICP Project Management Baseline (PMB) is in development and will be completed and submitted to DOE for review during the Implementation period. Each TO released against the contract will include a stand-alone schedule that is initiated and managed in the PMB in accordance with the ICP End State contract requirements found in Section C.9.2.01 Program Management/Support/Administration.

B.3 Office of EM Goals and Priorities

The DOE EM stated priorities are as follows:

- Activities to maintain a safe, secure, and compliant posture
- Radioactive tank waste stabilization, treatment, and disposal
- Spent (used) nuclear fuel and nuclear materials management and disposition
- TRU and mixed low-level waste (MLLW) disposition
- Soil and groundwater remediation
- Excess facilities deactivation and decommissioning (D&D)

Further, EM has identified the following specific ICP priorities for the Idaho National Laboratory (INL):

- FY-2022 – Complete targeted buried waste exhumation
- FY-2024 – Complete transfers of spent nuclear fuel from wet to dry storage
- FY-2028 – Complete the treatment of remaining liquid sodium-bearing waste
- FY-2029 – Complete installation of the Evapotranspiration Cap at the SDA

IEC's management approach for the execution of the ICP IDIQ Performance Work Statement (PWS) is in direct alignment with these priorities.

C. Task Order (TO) Discussions

The ICP work scope will be performed using focused TOs to achieve desired End States deploying a TO management process that is forward-looking, adaptive, and flexible, and integrates DOE priorities across the ICP. Task orders will be administered in a manner to maximize efficiency and integrative management opportunities across all tasks. The contemplated TOs to be executed are shown in the ***Notional End State Task Order Contract Strategy*** on the following page. It provides a synopsis of the partnering sessions and aligned strategic imperatives between DOE-ID and IEC.

Each TO will be managed as a project with a beginning and clearly defined end date, concise interim milestones for performance measurement, and agreed-to End States.

	Notional End State Task Order Contract Strategy						
TO/Sub Task No.	Task Order/Activity Scope	Rationale for Scope	Contract Type	Incremental Milestones	Completion Definition	Period of Performance	Estimated Cost
1	Transition	Contract Transition	CPNF		Contract Transition	10/1/21-1/1/22	\$3.5M
2	Implementation Task Order	Continuity of Operations	CPFF		Continuation of Operations	1/1/22-4/30/22	\$140.5M
3	Integration & Mission Continuity (IMC) Phase 1 Task Order	Core Contract Support Programs and Task Order Definitization	CPAF (w/PEMP)		Two-Year Period of Performance	5/1/22-5/1/24	\$180M (FY22) \$340.6M (FY23) TBD (FY24)
3	IMC Phase 2 Task Order	Core Contract Support Programs	CPAF (w/PEMP)	Re-evaluate bi-annually and evaluate work scopes for potential conversion to independent Task Orders	Bi-annual update	5/1/24-5/1/26, Bi-annual update thru 2032	TBD
4	RWMC Closure End State Task Order	Combination of activities needed to achieve RWMC demolition and CAP					TBD
4a	ARP/SDA Demolition		CPIF	ARP/SDA Demolition Complete	Complete Demo & Closure ARP/SDA facilities	FY23-FY24	
4b	OCVZ Well Abandonment		Contemplated FFP	Complete OCVZ well abandonment	Complete OCVZ Well Abandonment	FY23-FY24	
4c	AMWTP Facility RCRA Closure & Demolition		CPIF	RCRA Closure and Demolition of 7 AMWTP Facilities	Complete Demo & Closure AMWTP facilities	FY23-FY27	
4d	SDA Cap Construction		CPIF	1st load of dirt to SDA, 25, 50, 75% dirt hauled; cap complete; report submitted	Complete CAP construction	FY23-FY29	
5	IWTU Operations and Tank Closure End State Task Order	Activities required to complete Tank Closure					\$90M (FY23) TBD (FY24-FY28)
5a	IWTU Operations		CPIF	Maintain hot operations/routine operations/ Milestones - % tank process & Empty tanks and operational outages	Complete tank waste processing	FY23-FY28	
5b	Tank Closure (4 tanks & supporting structures)		CPIF	Close, clean & grout all 4 tanks, place interim cap over tanks (regulatory doc for closure)	Complete tank closure and placement of interim cap	FY27-FY28	
6	SNF Transfer & Packaging End State Task Order	Activities required to prepare & ready HLW & SNF for shipment					TBD
6a	Fuel Transfers (Peach Bottom fuel from Gen1 to Gen2 vaults)		CPIF		Complete fuel transfer to dry storage	FY22-FY24	
6b	Packaging Fuel Operations for Staging		CPIF	Initiate repackaging & 50th,100th repack, etc.. complete	Complete SNF packaging for staging	FY30-FY35	
7	Calcine Disposition End State Task Order	Activities to support retrieval/processing & disposition of calcine waste					TBD
7a	Calcine Processing and operations		CPIF	First canister produced, 50th, 100th, processing complete	Complete canister processing	FY29-FY36	
7b	Bin Set Closure (RCRA closure & interim Cap)		CPIF	Empty each bin set (7), close/grout bins (7) & interim cap complete	Complete bin set closure, grouting & interim CAP placement	FY33-FY40	
8	Naval Reactors End State Task Order	Removal & Disposition of Aging Naval Facilities					TBD
8a	S1W D&D		CPIF	Documentation to demonstrate closure & demo complete of NR facilities	Complete Demolition of specified NRF facilities	FY23-FY28	
8b	Core Barrel Car			New Scope		FY22-FY27	
Note	Task Orders will be developed and sequenced using an Integrated Priority List Process						

C.1 Implementation Period Task Order (TO2)

The Implementation Period TO is not an End State TO. The Implementation period is a 120-day period that will provide continued, uninterrupted ICP operations while allowing DOE-ID and IEC to further define strategies and details for project execution.

Implementation Period Task Order (TO2)	
Scope	Contract Implementation
Period of Performance	January 1, 2022 – April 30, 2022
Rationale	Uninterrupted Continuity of Operations
Estimated Cost	\$140.5 Million
Contract Type	Cost Plus Fixed Fee (CPFF)
Completion Definition	Continuity of Operations

C.1.a Scope

During the Implementation Period, IEC will complete the Accelerated Retrieval Project (ARP) Waste Exhumation and initial processing scope that was scheduled to be completed by the predecessor contractor by the end of contract transition. This work will be completed to mitigate impact to the RWMC Closure End State. Any necessary additional waste processing of exhumed CERCLA waste will be completed under the IMC TO (TO3) as part of legacy waste disposition.

Also during the Implementation Period, IEC will assure continued progress on the start-up and preparation for hot operations of the IWTU to ensure that it is fully operational to support the IWTU Operations and Tank Closure End State.

As a critical element of this TO, IEC will develop the IMC Phase 1 (TO3) proposal that will support efficiencies in project execution and development of future TOs in a strategic and tactical way to ensure End State accomplishments. During the Implementation Period, project planning will be performed, risks will be identified and quantified, and scopes will be evaluated to confirm timing for future task orders. During the detailed planning process, the End State TO scope and contract types will be evaluated and refined. This includes evaluating opportunities for movement of additional work scope into End State TOs and incentive or fixed-price contract structures. During planning TO resource allocation will be defined for incorporation in future updates to this Ten-Year Plan.

C.1.b Period of Performance

The Implementation Task Order will begin January 1, 2022 and end April 30, 2022.

C.1.c Rationale

This TO is stipulated in the ICP End State contract.

C.1.d Estimated Cost

The estimated cost of this TO is \$140.5 million. This cost represents the estimated/project costs for funding (includes Navy and non-defense, but not fee).

C.1.e Contract Type

The Implementation Period TO will be managed as a Cost-Plus-Fixed-Fee (CPFF) contract as stipulated in the ICP End State contract.

C.1.f Completion Definition

This TO will be completed April 30, 2022, as stipulated in the Request for Proposal for the ICP End State contract

C.2 Integration & Mission Continuity (IMC) Phase 1 Task Order (TO3)

The IMC Phase 1 TO is not an End State TO. This TO provides for operational continuity and programmatic support for a two-year period during which End State TOs will be defined, developed, and negotiated.

C.2.a Scope

The IMC Phase 1 TO will include all IEC work scope pending DOE authorization to prepare concise proposals for individual End State TOs. Timing for preparation of the End State TOs will be dependent on the DOE's priority for the work scope and TOs will be developed and sequenced collaboratively using an Integrated Priority List process.

IMC Phase 1 Task Order (TO3)	
Scope	IMC Phase 1
Period of Performance	May 1, 2022 – May 1, 2024
Rationale	Core Programs that support for contract duration and evaluation and development of End State TOs
Estimated Cost	\$180 Million (FY22) \$340.6 Million (FY23) TBD (FY24)
Contract Type	Cost Plus Award Fee (w/PEMP)
Completion Definition	Two-year Period of Performance

As the End State TOs are developed, negotiated, and implemented, the IMC Phase 1 TO will continue to house the core programs that maintain a comprehensive and effective continuity capability across ICP projects to support achievement of defined End States throughout the two-year IMC Phase 1 TO period. At the completion of the IMC Phase 1 TO period of performance, programmatic support, along with any IMC Phase 1 TO scope that has not been captured in End State TOs, will be transferred to the IMC Phase 2 TO discussed in Section C.3.

C.2.b Period of Performance

The IMC Phase 1 TO will remain in place for a two-year period beginning 5/1/2022 and ending 5/1/2024.

C.2.c Rationale

This TO is stipulated in the ICP End State contract. The rationale for initial embedment of all tasks in the IMC Phase 1 TO is to assure that all variables and interrelationships between programs and operational aspects are thoroughly defined, quantified, and understood, and that the associated risks for the key activities to support the End State TOs are quantified, and mitigations defined. From the IMC Phase 1 TO, specific End State TOs can be strategically and tactically segregated, defined, and negotiated as specific completion scopes to achieve the desired End States. This approach also

assures that all contemplated incentives and objectives for the IMC Phase 1 TO are managed under one PEMP, reducing administrative burden and associated cost with management of multiple PEMPs. Finally, the approach assures that as the interrelationships are clearly defined the subsequent End State TOs are less subject to burdensome contract change management processes.

C.2.d Estimated Cost

The estimated cost of the IMC Phase 1 TO is \$180 million in FY22 and \$340.6 million in FY23. This cost represents the estimated/project costs for funding (includes Navy and non-defense, but not fee). The cost for FY24 is TBD and will be developed once IEC has formally begun contract execution.

C.2.e Contract Type

The IMC Phase 1 TO3 will be managed as a Cost-Plus-Award-Fee (CPAF) TO, with a PEMP, as stipulated in the ICP End State contract.

C.2.f Completion Definition

The IMC Phase 1 TO is not an End State TO. It will be completed on 5/1/2024.

C.3 Integration & Mission Continuity (IMC) Phase 2 Task Order (TO3)

The IMC Phase 2 TO is not an End State TO. It is the primary programmatic support TO that will be reviewed and refined prior to transition from Phase 1. It will continue to include enabling, variable work scopes not assigned to specific Task Orders during the IMC Phase 1 TO. The IMC Phase 2 TO will be reviewed bi-annually and revised, negotiated, and extended, if approved, to reflect any changes in DOE priorities or definition and implementation of additional End State TOs.

IMC Phase 2 Task Order (TO3)	
Scope	IMC Phase 2
Period of Performance	May 1, 2024 – Contract End, subject to bi-annual reviews, negotiations, and updates
Rationale	Core Programs that support for contract duration and include continued evaluation of work scopes for potential conversion to independent Task Orders
Estimated Cost	TBD – Will be addressed prior to transition to Phase 2 of the TO
Contract Type	Cost Plus Award Fee (w/PEMP)
Completion Definition	Bi-Annual Update through contract duration

C.3.a Scope

The IMC Phase 2 TO will continue to house the core programs that maintain a comprehensive and effective continuity capability across ICP projects to support achievement of defined End States throughout the life of the contract.

Certain support activities are not tied to a specific End State but have overarching impacts during the life of the contract. These include:

- Program Management & Support Functions/Indirects – Business services, core safety programs supporting all projects, CERCLA – Environmental Restoration
- Facility and Infrastructure Upgrades – Specific facility and infrastructure upgrades will be addressed as identified during project execution
- Certify, package, and ship RH TRU waste in shielded container – As waste and the Waste Isolation Pilot Plant (WIPP) are available
- Retrieve/Process & Ship NE RH MLLW – As waste and transportation are available
- Idaho CERCLA Disposal Facility (ICDF) Design/Construction – ICDF must be available to receive waste from site-wide CERCLA D&D activities

The above activities were initiated in the IMC Phase 1 TO and may be transferred to the IMC Phase 2 TO for further management to completion.

Additional activities, also initiated in the IMC Phase 1 TO have a high degree of variability and risk tied to:

- IWTU becoming fully operational to support Tank Closure, Sodium-Bearing Waste Disposition, and Calcine Processing.
- Waste still in discovery/evaluation phase
- DOE Order 413.3b Capital Asset acquisition process
- Availability of receiving facilities to accept wastes and SNF (i.e., WIPP, NNSS, and the National Repository)

These additional activities include:

- Legacy Waste Disposition (Contact-Handled [CH] TRU and MLLW)
- IWTU Startup Operations
- Facility Modifications and SNF Packaging Demonstration (CPP-603)
- Design/Construct SNF Interim Staging & Packaging Facility
- Calcine Demonstration Project (Retrieval Development/Mock up)
- Design & Construct Calcine Process

It is expected that these risks will be addressed and mitigated with the potential to support the development of future End State TOs. Activities for which risks remain unmitigated will be further managed and monitored for resolution in the IMC Phase 2 TO. These activities directly impact the completion of the contemplated End State TOs. These activities are described in the following table, which identifies the specific risks to be addressed and mitigated to support development and implementation of the specific and discrete End State TOs.

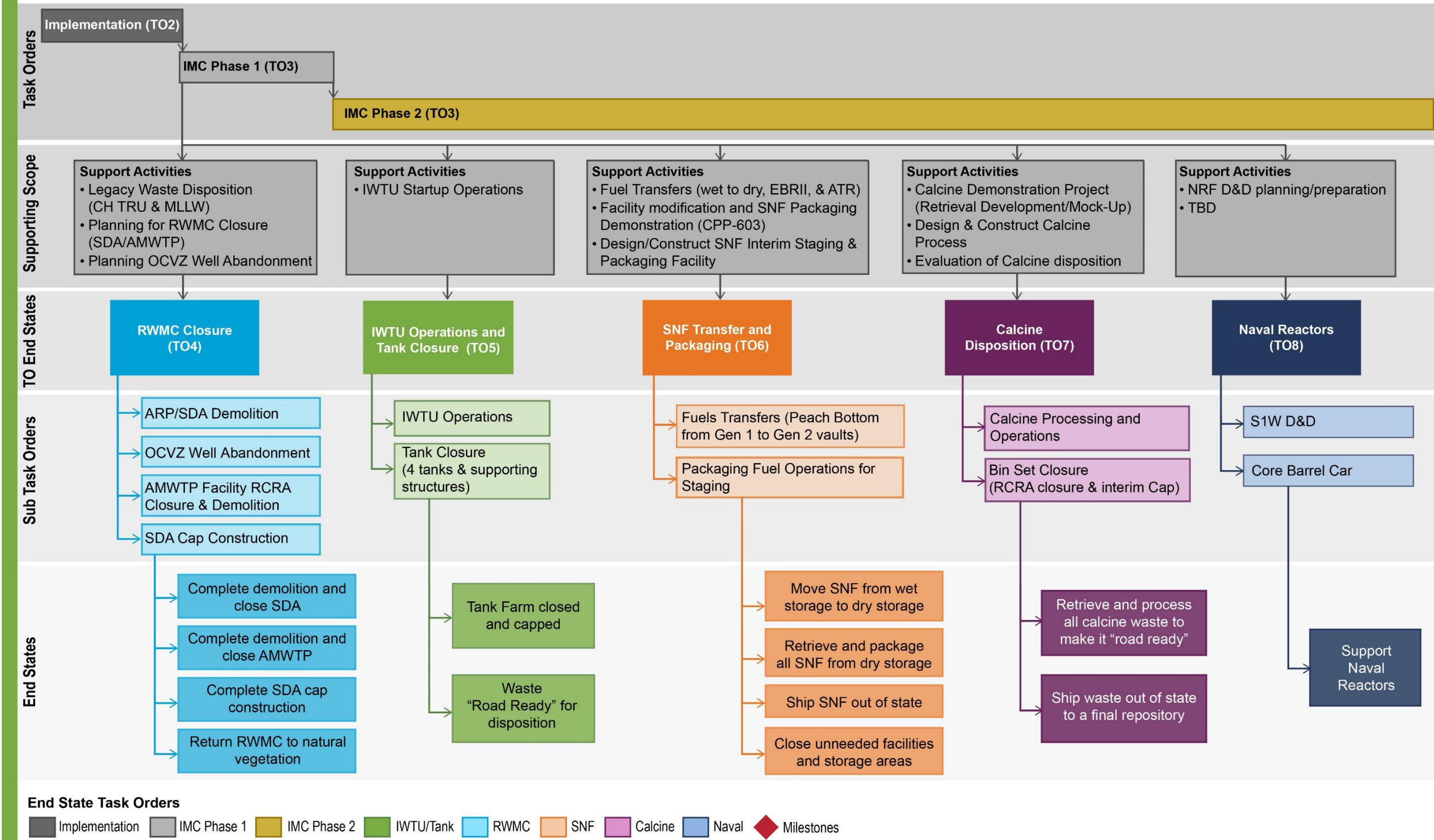
Activities	Risk	Associated End State Task Order
Legacy Waste Disposition (CH TRU and MLLW)	These wastes are destined for disposal, off-site at the Waste Isolation Pilot Plant or the Nevada National Security Site. Access to these facilities in a timely fashion is not within our ability to control and wastes may be packaged and ready for final disposal but be held awaiting approval to ship from the receiving facilities. These wastes reside in the RWMC and they must be dispositioned before completing the RWMC Closure End State.	RWMC Closure
IWTU Startup Operations	IWTU is currently completing modifications and final demonstration testing to confirm readiness to begin facility hot operations. Startup operations have just been initiated by the predecessor contractor and will not be completed by the time the ICP contract transitions to IEC on 1/1/2022. The IWTU must be fully tested and reliably operational to treat 900,000 gallons of SBW stored in underground storage tanks in the tank farms and is key to completing the IWTU Operations and Tank Closure End State.	IWTU Operations and Tank Closure
Facility Modification and SNF Packaging Demonstration (CPP-603)	The cost and path forward for this activity are still in development. The Facility Modifications and the Packaging Demonstration Project will be essential to assuring necessary infrastructure and processes are developed, tested, and proven to be effective.	SNF Transfer and Packaging
Design and Construct SNF Interim Staging and Packaging Facility	Subject to the DOE Order 413.3B Capital Acquisition Process.	
Calcine Demonstration Project (Retrieval Development/Mock up)	The Calcine Demonstration project is in early phase development and demonstration for Bin Set retrievals. Until this demonstration has been completed successfully this represents an uncertainty in completing the Calcine Disposition End State. The DOE is currently evaluating the identified path forward for Calcine treatment. This activity is also subject to the DOE Order 413.3B Capital Acquisition Process.	Calcine Disposition
Design and Construct Calcine Process at IWTU		

The relationship between each of these IMC activities and the associated End State TOs is shown in the ***End State Task Order Strategy Flowchart***.

C.3.b Period of Performance

The IMC Phase 2 TO will begin 5/1/2024 and run through contract duration to support core missions and continuity in the provision of programmatic support. This TO will be evaluated every two years in accordance with the PEMP and modified and re-baselined to reflect changing conditions and priorities and to show the integration of specific activities into the End State TOs.

End State Task Order Strategy Flowchart



Notes: TO1 Transition complete 1/2022.
Task Orders will be developed and sequenced using an Integrated Priority List process.

C.3.c Rationale

The IMC Phase 2 TO recognizes that there are programmatic support elements that will be required over the life of the contract and these will be captured first in the IMC Phase 1 TO and continued in the ICM Phase 2 TO until contract end. As discussed in Section C.2, all tasks are initially embedded in the IMC Phase 1 TO. The two-year period of performance of the IMC Phase 1 TO will be utilized to support the development of well-defined TOs that minimize the risks of changes required during TO execution.

The IMC Phase 2 TO will include programmatic support activities for the life of the contract, as well as any high-risk activities not resolved in the IMC Phase 1 TO; specifically, longer-term activities for which risk and uncertainties cannot be adequately quantified during the IMC Phase 1 TO period of performance. The PEMP developed in the IMC Phase 1 TO will be carried over to the IMC Phase 2 TO and updated as appropriate through the life of the contract.

C.3.d Estimated Cost

Estimated costs for IMC Phase 2 will be developed prior transition to Phase 2.

C.3.e Contract Type

The IMC Phase 2 TO (TO3) will be managed as a Cost-Plus-Award-Fee (CPAF) TO.

C.3.f Completion Definition

The IMC Phase 2 TO is not an End State TO. Completion will be demonstrated during bi-annual updates and at contract completion.

C.4 RWMC Closure End State Task Order (TO4)

C.4.a Scope

The RWMC Closure End State TO scope includes all activities associated with closing the RWMC, including RCRA closure, demolition, and capping of the SDA; Organic Contamination in Vadose Zone (OCVZ) well abandonment; and closure and demolition of RWMC facilities, including AMWTP. Tied to this is completion of necessary waste treatment and processing in the ARPs and AMWTP to the extent necessary to support deactivation and demolition of the facilities while assuring ongoing support to the Idaho Site.

RWMC Closure End State Task Order (TO4)	
Subtask 4a – ARP/SDA Demolition	
Subtask 4b – OCVZ Well Abandonment	
Subtask 4c – AMWTP Facility RCRA Closure & Demolition	
Subtask 4d – SDA Cap Construction	
Scope	Complete waste operations, close and demolish RWMC facilities, abandon OCVZ wells, construct evapotranspiration cap over the SDA, and revegetate RWMC
Period of Performance	Subtask 4a: FY23 – FY24
	Subtask 4b: FY23 – FY24
	Subtask 4c: FY23 – FY27
	Subtask 4d: FY23 – FY29
Rationale	Combination of activities to achieve RWMC Closure
Estimated Cost	TBD – Will be addressed in TO proposal development
Contract Type	Subtasks 4a, 4c, and 4d: Cost Plus Incentive Fee Subtask 4b: contemplated Firm Fixed Price
Completion Definition	RWMC Closed

We anticipate that the work will be accomplished under four subtasks:

- Subtask 4a – ARP/SDA Demolition
- Subtask 4b – OCVZ Well Abandonment
- Subtask 4c – AMWTP Facility RCRA Closure & Demolition
- Subtask 4d – SDA Cap Construction

C.4.b Period of Performance

The expected period of performance for TO4, including all subtasks, is FY23 through FY29. The period of performance for the subtasks is:

- Subtask 4a – ARP/SDA Demolition will begin in FY23 and end in FY24
- Subtask 4b – OCVZ Well Abandonment will begin in FY23 and end in FY24
- Subtask 4c – AMWTP Facility RCRA Closure & Demolition will run from FY23 through FY27
- Subtask 4d – SDA Cap Construction will begin in FY23 and end in FY29

C.4.c Rationale

The End State desired is completion of closure of the RWMC. This meets the regulatory milestone to complete the SDA Cap by the end of FY29. The rationale for the four sub-tasks acknowledges the required major aspects of closure, but also allows for optimization and flexibility between the tasks to allow for the opportunity to maximize multiple fronts of progress as situations develop, or challenges are encountered in any one area: such as legacy waste processing, or delays in shipping.

C.4.d Estimated Cost

Estimated costs for this TO will be developed in the RWMC Closure End State TO Proposal.

C.4.e Contract Type

A CPIF TO is contemplated for subtasks 4a, 4c, and 4d. The CPIF TO structure for these subtasks is intended to balance the risk appropriately and motivate efficient and effective contract performance. It is intended for IEC to bear an equitable share, but also be compensated for optimum contract performance and assuming cost risk. Cost and performance incentives will be structured to include measurable targets with objective criteria to reward completion of this End State TO.

The scope in subtask 4b is contemplated as Firm-Fixed Price (FFP) as it is concise, well defined scope with sufficient detail to support a clear FFP task order.

C.4.f Completion Definition

The RWMC Closure End State TO will be considered complete when the SDA and AMWTP facilities have been demolished and closed, the OCVZ wells have been abandoned, the cap has been installed over the SDA, and the RWMC has been returned to natural vegetation.

C.5 IWTU Operations and Tank Closure End State Task Order (TO5)

C.5.a Scope

The IWTU Operations and Tank Closure End State TO will include two contemplated subtasks:

- Subtask 5a – IWTU Operations
- Subtask 5b – Tank Closure

This TO encompasses the activities associated with closing four tanks located at the INTEC Tank Farm, including:

- Removal and treatment of 900,000 gallons of SBW contained in the tanks
- RCRA closure and stabilizing the emptied tanks under DOE O 435.1
- Placing an interim cap over the tank farm

This TO also includes maintaining the operational capability of the IWTU to treat the SBW and storage of treated SBW in the IWTU Product Storage Building to await final disposition in a Repository.

Note that the IWTU must be fully and reliably operational to treat SBW stored in underground storage tanks in the tank farms and is key to completing the IWTU Operations and Tank Closure End State.

C.5.b Period of Performance

The expected period of performance for TO5 is FY23 through FY28. The period of performance for the subtasks is:

- Subtask 5a – IWTU full Operations subtask is anticipated to start in late FY22 or early FY23 and end in FY28
- Subtask 5b – Tank Closure is contemplated to begin in FY27 and end in FY28.

C.5.c Rationale

The End State desired is completion of tank closure. This meets the regulatory milestone to complete SBW processing by the end of FY28. The rationale for the two sub-tasks acknowledges that the IWTU, once fully operational, is the instrument required to complete processing of the SBW, and that subsequent tank closures are the actual completion desired. Additionally, the opportunity to optimize the tank closure process remains open with a segregated TO strategy such that accelerated closure optimization plans can be explored and implemented as appropriate.

C.5.d Estimated Cost

IWTU Operations and Tank Closure End State Task Order (TO5)	
Subtask 5a – IWTU Operations	
Subtask 5b – Tank Closure (4 tanks and supporting structures)	
Scope	Empty, close, clean and grout 4 tanks, treat SBW, and place an interim cap over tank farm
Period of Performance	Subtask 5a: FY23 – FY28
	Subtask 5b: FY27 – FY28
Rationale	Activities required to complete tank closure and tank waste processing
Estimated Cost	\$90 Million (FY23) TBD (FY24-FY28)
Contract Type	Cost Plus Incentive Fee
Completion Definition	Tanks are closed and capped with SBW packaged and “Road Ready” for final disposition

The estimated cost of the IWTU Operations and Tank Closure End State TO is \$90 million in FY23. The costs for FY24 through FY28 are TBD and will be developed once IEC has formally begun contract execution.

C.5.e Contract Type

The IWTU Operations and Tank Closure End State TO is contemplated as a CPIF as stipulated in the ICP End State contract. This End State TO includes performance-based scope that is complex and unique to the ICP. IEC's technical approach and method to perform this End State TO will require a high degree of technical capability.

C.5.f Completion Definition

This TO will be considered complete when the INTEC Tank Farm has been closed and capped with the SBW extracted from the tanks having been treated, packaged, and placed in storage, awaiting final disposition.

C.6 SNF Transfer and Packaging End State Task Order (TO6)

C.6.a Scope

This TO scope includes movement of Peach Bottom fuels from Gen1 to Gen2 vaults, preparation and packaging of fuel for shipment in accordance with the Idaho Settlement Agreement, and closure of unneeded facilities and storage areas.

To support accomplishment of this End State the Facility Modifications and the Packaging Demonstration Project will be essential to assuring necessary infrastructure and processes are developed, tested, and proven to be effective.

SNF Transfer and Packaging End State Task Order (TO6)	
Subtask 6a – Fuel Transfers (Peach Bottom fuel from Gen1 to Gen2 vaults)	
Subtask 6b – Packaging Fuel Operations for Staging	
Scope	Complete fuel transfers to dry storage and package and prepare fuel for shipment out of the state of Idaho
Period of Performance	Subtask 6a: FY22 – FY24
	Subtask 6b: FY30 – FY35
Rationale	Activities required to prepare and ready SNF to shipment.
Estimated Cost	TBD – Will be addressed in TO proposal development
Contract Type	Cost Plus Incentive Fee
Completion Definition	Move SNF from wet storage to dry storage, retrieve and package all SNF from dry storage, ship SNF out of state, and close unneeded facilities and storage areas.

We anticipate that this work will be accomplished under two subtasks:

- Subtask 6a – Fuel Transfers (Peach Bottom fuel from Gen1 to Gen2 vaults)
- Subtask 6b – Packaging Fuel Operations for Staging

C.6.b Period of Performance

The period of performance for TO6 is FY 22 through FY35, including subtasks. Subtask 6a – Fuel Transfers (Peach Bottom fuel from Gen1 to Gen2 vaults) is anticipated to begin in FY22 and end in FY24, with Subtask 6b – Packaging Fuel Operations for Staging to begin in FY30 and end in FY35.

C.6.c Rationale

The chief objective for this TO is to achieve “Road Ready” status for fuels destined for the national repository by FY35, as well as to reduce risk to ongoing fuel management by completing transfer of the Peach Bottom fuels from the Gen1 to Gen2 vaults. While the risk for obtaining fuels repackaging capabilities cannot be ignored, the creation of the two tasks demonstrates commitment to meeting the regulatory milestone to the extent possible through both physical completion (Peach Bottom), and tactically through planned implementation of the fuels packaging operations.

C.6.d Estimated Cost

Estimated costs for this TO will be developed in the SNF Transfer and Packaging End State TO Proposal.

C.6.e Contract Type

A CPIF TO is contemplated for the SNF Transfer and Packaging End State TO.

C.6.f Completion Definition

This TO will be complete when all SNF has been moved from wet to dry storage, retrieved from dry storage and packaged, shipped out of state, and the unneeded SNF facilities and storage areas have been closed.

C.7 Calcine Disposition End State Task Order (TO7)

C.7.a Scope

Once the bin retrieval system and processing systems have been successfully demonstrated and the final alternative selection is completed for waste processing, two subtasks will be developed to achieve the Calcine Disposition End State:

- Subtask 7a – Calcine Processing and Operations
- Subtask 7b – Bin Set Closure (RCRA Closure and Interim Cap)

Calcine Disposition End State Task Order (TO7)	
Subtask 7a – Calcine Processing and Operations	
Subtask 7b – Bin Set Closure (RCRA closure & interim cap)	
Scope	Calcine processing and operations and Bin Set Closure
Period of Performance	Subtask 7a: FY29 – FY38
	Subtask 7b: FY33 – FY40
Rationale	Activities to support retrieval, processing, and disposition of Calcine waste
Estimated Cost	TBD – Will be addressed in TO proposal development
Contract Type	Cost Plus Incentive Fee
Completion Definition	Complete canister processing of calcine waste and complete bin set closure, grouting, and interim cap placement

The subtasks for this End State will encompass all work needed to complete the emptying of the Calcine bin sets, process the retrieved waste, and package the waste to make calcine “Road Ready” in accordance with the Idaho Settlement Agreement.

Upon completion of retrieval of the Bin sets the scope will also include necessary actions to complete RCRA and DOE Order 435.1 HLW closure of the Bin Sets.

C.7.b Period of Performance

The period of performance for these subtasks is anticipated to be FY29 to FY38 for subtask 7a and FY33 to FY40 for subtask 7b.

C.7.c Rationale

A critical component to achieving the desired End State for Calcine road ready by 12/31/38, is assuring the demonstration project contemplated is completed under the IMC TO. However, it is also imperative that several variable issues beyond the demonstration must be resolved collaboratively to assure the End State remains achievable: including final determination and development of treatment processes, and corrective actions determined, further tested, and proven from the bin set retrieval pilot. The two contemplated TOs and their development and agreement are necessary to assure that all parties understand the need for clear and concise addressal of the variable issues as quickly as possible. This will better assure that the final enabling processes, resources, and capabilities are established to support the End State TOs. Further, segregation of the TOs allows for continued examination and evaluation of optimized approaches that better allow for acceleration of processing, packaging, and closure as these processes are defined and implemented.

C.7.d Estimated Cost

Estimated costs for this TO will be developed in the Calcine Disposition End State TO Proposal.

C.7.e Contract Type

A CPIX TO is contemplated for the Calcine Disposition End State TO.

C.7.f Completion Definition

The Calcine Disposition End State TO will be considered complete once the Calcine bin sets have been emptied, the calcine has been processed, packaged, and made “Road Ready,” and the bins have been closed, grouted, and capped.

C.8 Naval Reactors End State Task Order (TO8)

C.8.a Scope

The scope of this TO is to provide services and expertise to Naval Reactors in the disposition and removal of aging facilities. The contemplated scope at this time includes two scopes of work identified as subtask 8a – S1W D&D and subtask 8b – Core Barrel Car. Additional scope may be added at the discretion of the Navy. This is non-EM work and funding for these activities will be provided by an outside source.

Naval Reactors End State Task Order (TO8)	
Subtask 8a – S1W D&D	
Subtask 8b – Core Barrel Car	
Scope	S1W demolition and core barrel car disposition
Period of Performance	Subtask 8a: FY23 – FY28
	Subtask 8b: FY22 – FY27
Rationale	Removal and disposition of aging Naval facilities
Estimated Cost	TBD – Will be addressed in TO proposal development
Contract Type	Cost Plus Incentive Fee
Completion Definition	Completion of S1W demolition and Core Barrel Car disposition

C.8.b Period of Performance

The period of performance contemplated for the Naval Reactors End State TO is specific to the currently identified scopes but could expand and will be addressed as additions to the TO, as required. The current period of performance for subtask 8a – S1W D&D is FY23 to FY28. The period of performance for subtask 8b – Core Barrel Car is FY22 to FY27.

C.8.c Rationale

The rationale for segregating the Navy Reactors TOs is to assure that the scope of work is clearly defined for each contemplated action that the Navy expects to have accomplished as part of its efforts to reduce risk to the NRF and the Idaho Site in general. Further, some work contemplated, such as the Core Barrel Car, may require extensive use of existing or modified EM facilities sequenced with ICP scopes to complete the desired End State and is not necessarily interrelated to other Navy Reactors scopes.

C.8.d Estimated Cost

Estimated costs for this TO will be developed in the Naval Reactors End State TO Proposal.

C.8.e Contract Type

A CPIF TO is contemplated for the Naval Reactors End State TO.

C.8.f Completion Definition

This TO will be considered complete when the S1W has been demolished and dispositioned and the Core Barrel Car has been dispositioned.

D. Partnering

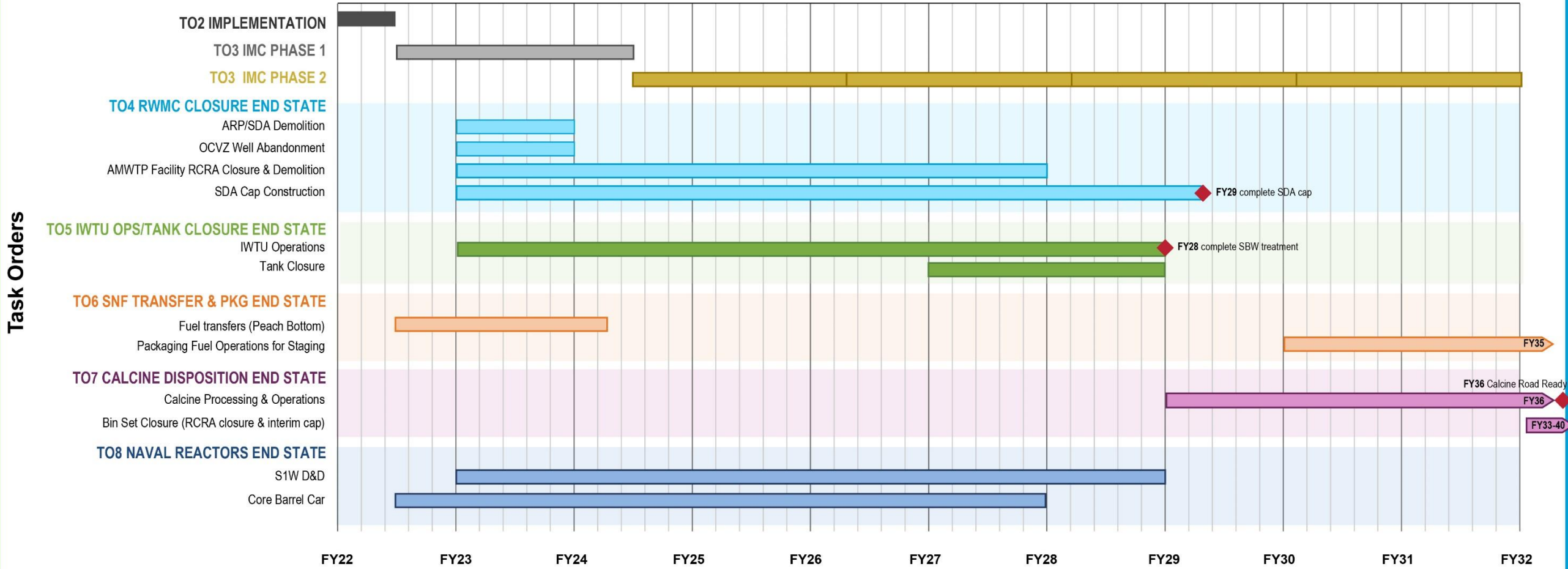
The DOE-ID and IEC have established a routine collaborative and iterative process wherein each party has been present and engaged in the identification of the Department's strategic imperatives. The foregoing strategy, including the defined End States, was developed, and agreed to between the parties.

The parties also recognize the need for continuing a defined process for strategic risk management that sets priorities and informs TO development in a way that reduces risk and supports End State achievement in a tactical manner that considers resource availability, funding, regulatory, and budget limitations.

E. Schedule

The contemplated schedule for TO development and deployment is provided in the ***Notional End State Task Order Schedule*** on the following page.

Notional End State Task Order Schedule



End State Task Orders

Implementation IMC Phase 1 IMC Phase 2 IWTU/Tank RWMC SNF Calcine Naval Milestones

Notes: TO1 Transition complete 1/2022.
Task Orders will be developed and sequenced using an Integrated Priority List process.